WaterTalk Newsletter August 2001

EPA NEWS

Improving Water Quality on the Columbia/Snake River

An important effort is underway to improve water quality on the mainstem of the Columbia/Snake River. Most of the Columbia River Mainstem and the Lower Snake River Mainstem do not meet clean water goals, called *water quality standards*, for water temperature and total dissolved gas. (Especially in spring and summer, the water is too warm and there is too much oxygen and nitrogen in the water.) Meeting these water quality standards is especially important on the Columbia River because several species of salmon and steelhead in the Columbia Basin have been listed under the federal Endangered Species Act. Now, EPA Region 10, the states of Idaho, Oregon and Washington, and the Columbia Basin Tribes are working together to help restore the health of these waters.

TMDLs Will Help Restore the Waters

Total Maximum Daily Loads, or TMDLs, are tools for improving water quality. Sometimes they are called AWater Quality Improvement Plans.@ TMDLs quantify how much of a pollutant a waterbody can handle and still meet water quality standards. Then, the TMDL defines how much each pollutant source must be reduced in order to achieve water quality standards.

EPA is assisting the states and Tribes by developing a TMDL for the Columbia/Snake River Mainstem to help address temperature problems. EPA will develop this temperature TMDL in close, ongoing coordination with the three states and the Columbia Basin Tribes. The temperature TMDL is scheduled for completion by the end of 2002.

To address problems with total dissolved gas, Oregon and Washington will develop TMDLs for sources in their states that affect the Columbia/Snake River Mainstem. EPA will coordinate with the tribes to develop the total dissolved gas TMDLs for the portions of the Columbia/Snake River Mainstem that flow through the tribal reservations. The TMDL for the Columbia River below the confluence with the lower Snake will be completed by the end of 2001. The TMDL for the Columbia and Lower Snake above the confluence with the Snake is scheduled to be completed by December 2002.

EPA, the states, and Tribes are already working hard to coordinate and share information on key technical issues and decision points.

Public Involvement is Key

Public involvement will be a key part of the process. Real progress depends on collaboration and understanding between the public and private sectors, and concerned citizens. The agencies and Tribes want to create an open and visible decision-making process to which stakeholders and the public have equal opportunity for access and input. Public comments will be incorporated throughout the decision making process.

For more information, or to get on the mailing list to receive updates, call Mary Lou Soscia, EPA Columbia River Coordinator, in Portland at 503/326-5873, or e-mail soscia.marylou@epa.gov. Future public meetings will be announced through mailings and public notices. Project details are also available on the Internet at www.epa.gov/r10earth/columbiamainstemtmdl.htm.

EPA Updates Fish Advisory Info

EPA has released its annual update of the National Listing of Fish and Wildlife Advisories. The 2000 list indicates a 7% rise nationally in fish consumption advisories since 1999. This increase generally reflects more extensive coverage by state monitoring programs, as well as improvements in data collection and monitoring methods. About 23% of the nation's lake acreage and 325,500 river miles were under fish consumption advisories during all or part of 2000. Seventy one percent of coastal waters, including 20 National Estuary Program sites, were under advisories. In Region 10, there were 26 fish consumption advisories in 2000, one more previous view than the year. To the fact sheet. go to www.epa.gov/ost/fish/advisories/factsheet.pdf.

TOOLS

Workshops Help Small Water Systems Communicate with Public

Workshops to help small public water systems communicate with the public about safe drinking water are on their way. In 1996, amendments to the Safe Drinking Water Act created a number of new standards and regulations. As a result, public water systems communicate more information more frequently to the public. Come to this class to learn how to handle risk communication, public meetings, media relations, and how to respond to topics such as the new Arsenic Rule, E. coli outbreaks, and corrosion control. The workshops are intended for public water systems serving less than 10,000 people. Continuing education credits may be available.

Workshops will be held:

Oct. 15-16: Treasure Valley, Idaho, contact Jeff Long, Idaho Rural Water, 208/343-7001 or 1-800-962-3257

Oct. 18-19: Shelton, Washington, contact Scott Hemingway, Evergreen Rural Water, 509/962-6326

Oct. 22-23: Tillamook, Oregon, contact Cheris Lane, Oregon Assoc. of Water Utilities, 503/873-8353

Watershed Workshops Talk Funding

Looking for creative ways to finance your watershed protection activities? **Watershed Funding Workshops** are coming soon to Idaho, Washington, and Oregon. (Workshops in Alaska already have taken place.) The workshops are designed to help watershed councils, advisory group members, local governments, and others working for watershed protection get the funding they need. The training will be an interactive session where participants will learn about innovative strategies, partnership opportunities, and federal, state, and private funding sources. With support from EPA, US Army Corps of Engineers, and state agencies, Boise State Universitys Environmental Finance Center will provide these workshops. Locations and dates have not yet been confirmed. To be notified when more information is available, call the Environmental Finance Center at 208/426-1567.

Conservation: Spin A Wheel

To help you in your conservation efforts, EPA is now offering two handy conservation tools. The first is an **AEnergy Conservation@ wheel**, a paper wheel which you can spin to reveal practical energy tips in a viewing window. The second paper wheel, called **AEarth Saver,@** gives recycling tips on one side, and information on household hazardous wastes on the other. For a free copy, call EPA=s Public Environmental Resource Center at 206/553-1200 or 1-800-424-4372.

EPA Creates Greenhouse Gas Calculator Online

Would you like to estimate your household's annual greenhouse gas emissions and learn how you can reduce them? If so, EPA has just the tool for you.

EPA's new **Personal Greenhouse Gas Calculator** at www.epa.gov/globalwarming/tools/ghg_calc.html provides a fast, easy way to obtain a rough estimate of your family's annual greenhouse gas emissions from transportation, home energy use, and waste disposal. After you calculate your emissions, the calculator enables you to see how many pounds of carbon dioxide you could shave off your total by taking some cost-effective actions to reduce your impact on the environment.

Invite your friends or classmates to use the calculator and compare your results. Write down your total emissions today and come back in a year to compare how they've changed. You can also compare how much you could save by lowering your thermostat on winter nights versus replacing five standard incandescent light bulbs with compact fluorescent bulbs.

To learn about climate change, check out the EPA Global Warming Site at www.epa.gov/globalwarming. The site has up-to-date information on the climate system; greenhouse gas emissions; impacts of climate change; and actions that can be taken at the national, state, local, business, and individual levels.

Watch Soon for Enviro Ed Grants

Watch soon for the opportunity to apply for education grants! The call for proposals under EPAs Environmental Education Grant Program is expected to come out at the end of August. Applications will be due in November. This annual grants program provides financial support for projects which design, demonstrate, or disseminate environmental education practices, methods, or techniques. Schools, universities, not-for-profit organizations, and local, state, and tribal government education agencies are eligible to apply.

Seventeen projects were funded in Region 10 last year. The projects included incorporating environmental education literature into K-3 curriculum; engaging citizen scientists in monitoring terrestrial wildlife; working with youths and their adult leaders to identify local environmental issues and create sustainable solutions; bringing watershed education programs to a local Latino community through family workshops, tours, festivals, and other nontraditional outreach efforts; and developing school-based solutions for transportation as an environmental, economic and health concern.

To receive a copy of the new solicitation when it is issued, call EPA=s Public Environmental Resource Center now at 1-800-424-4EPA or 206/553-1200. For program information, contact Sally Hanft at 206/553-1207 or 1-800-424-4EPA x1207, or email hanft.sally@epa.gov. Or, visit the web site at www.epa.gov/enviroed.

Box: Oregon School Gets EPA Ed Grant

Thurston High School in Springfield, Oregon, is all set to receive an EPA Environmental Education Grant of \$10K. They will use the funds to develop a comprehensive water science program. The program will integrate classroom instruction and water testing labs in their biology and chemistry courses with a variety of community-based research projects. The projects will range from monitoring urban-impacted streams to developing a student-operated community water-testing laboratory. The students will present the results of their water quality and macroinvertebrate studies to the local watershed council, water and electric board, and city officials.

Poster Contest for Rural Alaska Schools

The Alaska Training/Technical Assistance Center announces the third statewide **Drinking Water/Wastewater Poster and Essay Contest** for rural Alaska high schools. The purpose of the contest is to encourage students in small rural communities to learn more about their water

and wastewater systems and to develop an appreciation for the role that these systems play in community health and economic well being. It is also designed to foster interest in related careers. Participating students will study water systems and prepare a poster and essay about their local system.

The statewide winner will receive a one-year scholarship for the University of Alaska, travel to the Alaska Water/Wastewater Management Association annual conference, and \$100 cash. First, second, and third place winners will each receive \$100. The Assistance Center is EPA funded and serves small water systems in Alaska. For information, contact Nicole Duclos at 907/747-7756 or email nicole.duclos@uas.alaska.edu.

Grate Mate Volunteers Clean Stormwater

The **Grate Mate Program** is looking for volunteers in the Puget Sound area**C**youth, business leaders, and others who want to help protect the environment right in their local communities. Started in 1998 by PlanetCPR, a non-profit environmental organization, the Grate Mate Program is aimed at cleaning up polluted stormwater. Most urban storm drains empty directly to local waterways without any treatment. The Grate Mate Program is helping to reduce pollution by teaming up volunteer groups with businesses. Business owners buy special fabric filters and volunteers install them in local storm drains. For each drain filter installed, volunteers earn funds to support their organization. The Grate Mate filters keep over half of the oil, dirt, and trash from going down the drain by capturing it at the source. For more information about this program, or to volunteer, call PlanetCPR at 206/285-3999 or visit their Internet site at www.planetcpr.org.

Internet Guide to Financing Stormwater Management

Communities interested in finding ways to pay for stormwater management projects will be interested in this web site: **An Internet Guide to Financing Stormwater Management**. This site was developed by the Center for Urban Policy and the Environment at Indiana University-Purdue University Indianapolis in cooperation with the Watershed Management Institute, Inc. Funding was provided by EPA.

The site includes:

- a bibliography of stormwater finance materials
- an archive that contains selected previously published materials concerning stormwater finance
- a manual that discusses financing options for community stormwater management programs
- case studies that describe successful finance mechanisms
- links to other useful web sites

Visit the site at http://stormwaterfinance.urbancenter.iupui.edu/.

EPA Launches Interactive Permit Web Site

EPA has launched a new web site to provide easy access to information on its national wastewater permitting program, the **National Pollutant Discharge Elimination System** (NPDES). The site uses state-of-the-art database technology to manage documents, regulations, and contact information. Users are able to select a variety of ways to enter and view the website, from general interests to a detailed topics list for those more familiar with the NPDES program. The site also allows users to create and sort specialized lists of publications, guidance materials, and regulations. It can be accessed at www.epa.gov/npdes. If you have questions or comments, contact Ross Brennan at brennan.ross@epa.gov.

WATERS Improves Access To Local Water Info

EPA recently announced the **Watershed Assessment, Tracking and Environmental Results** (**WATERS**) integration web site. WATERS unites geographically specific water quality data from state web sites and EPA sites, including EPA's new National Water Quality Standards Database and its Total Maximum Daily Loads (TMDL) Database, with US Geological Survey's National Hydrographic Dataset. WATERS users can click on an interactive map to see which waters are classified by states as impaired (those waters not attaining water quality standards), and to learn the purpose or use of each waterbody (such as whether or not it is designated for protection as a drinking water supply, for recreational use, or for fishing). Although not yet complete, WATERS will eventually cover all 50 states, and contain links to data on ambient water quality, drinking water quality, polluted runoff, fish consumption advisories, facility discharge outfalls, and other information. For more on WATERS, visit www.epa.gov/waters on the Internet.

Tribal Environmental Web Site Launched

The National Environmental Training Center for Small Communities has launched a new web site: **The National Tribal Environmental Network**. Online at www.nten-nesc.org, the web site was created in response to requests from Tribal environmental professionals for increased communication among Tribes and to the public regarding Tribal environmental issues. The site includes a list of Tribes, information about funding sources for Tribes, articles about Tribal environmental issues, and links to environmental training organizations, assistance groups, and Tribal web sites. The Training Center, which operates with EPA support, also offers Tribal organizations a template to create their own low-cost web sites. For details, visit the web site or call 1-800-624-8301.

Guide Shares Principles for Constructing Wetlands

A new wetlands guide is now available on the Internet: Guiding Principles for Constructed Treatment Wetlands: Providing Water Quality and Wildlife Habitat. The document

includes:

- -guiding principles for siting, design, construction, operation, maintenance, and monitoring of constructed treatment wetlands
- -information on current agency policies, permits, regulations, and resources
- -answers to common questions

The Guiding Principles were developed by a federal Interagency Workgroup on Constructed Wetlands, including EPA. To view or download the document, visit EPA-s web site at www.epa.gov/owow/wetlands/constructed/guide.html. To request a paper copy of the document, the Wetlands Helpline at 1-800-832-7828 or send an email request wetlands.helpline@epa.gov.

Poster Highlights Safe Drinking Water Act

EPA still has copies of a poster useful to folks interested in details about the regulation of drinking water. Called Safe Drinking Water Is In Our Hands: Protect Our Health from **Source to Tap**, the poster was published in 1999. One side of the poster discusses:

- -consumer confidence reports
- -microbial and disinfection byproduct rules
- -drinking water source assessments
- -timeline of regulatory activities
- -ways to get more information

The other side of the poster offers a chart of national regulations. It lists each contaminant along with its regulatory limits, potential health effects, and common sources. To request a free copy, call EPA=s Public Environmental Resource Center at 206/553-1200 or 1-800-424-4372.

Wastewater Information at Your Fingertips

National Small Flows Clearinghouse (NSFC) recently established a listserver to announce NSFC publications, new products, and other information. By subscribing to the NSFC News Listsery, you can receive the latest information about sewage treatment options for homes and small community developments. New information is e-mailed on a regular basis.

To subscribe:

- Send an e-mail to: <macjordomo@mail.nesc.wvu.edu>
- Leave the subject line blank.
- In the message area, type: subscribe nsfcnews Firstname Lastname Place one space between each word as indicated. Example: subscribe nsfcnews John Smith

 - Do not add any extra text to the message.
- Send your message.

Funded by EPA, the NSFC helps small communities find affordable wastewater treatment alternatives to protect public health and the environment. The NSFC is a national source of information about "small flows" technologies---those systems that have fewer than one million gallons of wastewater flowing through them per day, ranging from individual septic systems to small sewage treatment plants.

Anyone who works with small communities to help solve wastewater treatment problems can benefit from the NSFC's services, which include more than 450 free and low-cost educational products, a toll-free technical assistance hotline, five computer databases, two free publications, and an online discussion group. For more information, visit NSFC's Web site at http://www.nsfc.wvu.edu.

WATERWORDS

Report Surveys Science on Land Use, Drinking Water

National forests and grasslands serve as sources of drinking water for an estimated 60 million Americans. Recently, a team of scientists and land managers from the USDA Forest Service, in cooperation with EPA, and the National Council for Air and Stream Improvement, reported the current science on the risks that common land uses pose for public drinking water sources. The report reviews effects of managing water, urbanization, recreation, roads, timber, fire, pesticides, grazing, wildlife and fish habitat, and mineral, oil, and gas resources on public drinking water source quality. Gaps in knowledge and research needs are indicated. Managers of national forests and grasslands and similar lands in other ownerships, environmental regulators, and citizens interested in drinking water may use this report for assessing contamination risks associated with land uses. The report, called **Drinking Water from Forests and Grasslands: a Synthesis of the Scientific Literature**, may be down-loaded from the Internet at http://www.srs.fs.fed.us/pubs/viewpub.jsp?index=1866

Local Communities To Restore Waters

National Association of Counties, the National Fish and Wildlife Foundation and the Wildlife Habitat Council recently awarded over \$600,000 in Five-Star Restoration Grants to 60 community-led conservation projects throughout the country. Eight of the awards were to communities in Region 10. The grants were made possible through major funding by EPA and the National Oceanic and Atmospheric Administration. Ranging from \$3,500 to \$20,000, the grants will help finance community-based wetland and streamside restoration projects. Consideration for funding is based upon the project's educational and training opportunities for students and at-risk youth, the ecological benefits, and other cultural and economic benefits to the community. This is the third year that Five-Star Restoration grants have been awarded. For more information on the Five-Star Restoration Program, including a list of this year's grant recipients, go to www.epa.gov/owow/wetlands/restore/5star/01grants.html.

SPOTLIGHT

Nursery Earns Pollution Prevention Award

By demonstrating environmental excellence and leadership in pollution prevention, Monrovia Nursery of Dayton, Oregon, has earned EPA=s prestigious **Evergreen Award**.

Monrovia, a leading grower of ornamental plants, uses innovative techniques to help prevent pollution. In summer, the nursery captures and reuses all surface irrigation runoff, saving water and reducing fertilizer impacts to nearby streams. Using integrated pest management methods, Monrovia has reduced pesticide use dramatically. Also, the company runs an innovative composting operation, practices a recycling program, and has actively reduced hazardous waste. The company has pioneered many environmentally friendly practices that others in the nursery industry have adopted.

EPA's Evergreen Award is designed to showcase companies that have clearly incorporated a pollution prevention ethic in their business planning and have demonstrated tangible reduction successes. Companies in Alaska, Idaho, Oregon and Washington are considered for nomination if they are in full compliance with environmental laws, and meet the criteria of 1) having documented achievement in pollution prevention, 2) a commitment to the environment, and 3) a history of environmental leadership.

Nominations are accepted from employees of environmental regulatory agencies, individuals, and the companies themselves. For details, contact Robert Drake, EPA, at 206/553-4803 or e-mail drake.robert@epa.gov.

Water Quality Conference: Call for Papers

The Research and Extension Regional Water Quality Conference 2002 is calling for papers. The event will be held in Vancouver, Washington, February 20-21, 2002. The conference will present current science and its application for technology transfer and outreach. Leading professionals from Alaska, Idaho, Oregon, Washington, and other states will come together to debate the emerging water issues that will shape the future of the region and the nation. For details about contributing a paper for consideration, check the Washington Water Research Center website at: http://www.wsu.edu/swwrc/ Or contact Marilyn Freeman, Extension Liaison to EPA at 206/553-0038, 1-800-424-4372 x0038, or freeman.marilyn@epa.gov.

Washington WaterWeeks Coming Soon!

Get ready! **Washington WaterWeeks** 2001 is coming. From September 1 to October 14, people all around the state of Washington will have opportunities to participate in more than 160 water and habitat related education and action activities. Events will include stream restorations, shoreline cleanups, watershed tours, festivals, kayak tours, conservation events and more. EPA is a supporting agency for this program. For an activity guide or more information, call WaterWeeks at 360/943-3642 or visit the web site at www.waterweeks.org.

Model Watershed Education Project Launches

A model education project which focuses on the links between land use, water quality, and community character is about to be launched in Kitsap County, Washington. The project will happen as part of NEMO, or **Nonpoint Education for Municipal Officials**, a national program for land-use decision makers that addresses the relationship of land use to natural resource protection.

The project will educate local elected and appointed officials and residents about watershed processes and their relationships to land use, so they can constructively participate in comprehensive watershed planning. The geographic focus is Kitsap County's Chico Creek watershed that drains to Puget Sounds Dyes Inlet. This Chico Creek Watershed Education Project is the result of a partnership of the University of Washingtons Sea Grant Program, Kitsap Dept. of Community Development, City of Bremerton, Puget Sound Water Quality Action Team, EPA Region 10, Suquamish Tribe, Puget Sound Naval Shipyard, Kitsap Public Utility Dist. #1, and Port Blakely Communities.

To learn more about NEMO or how your community might start its own project, visit the web site at http://nemo.uconn.edu. For details about the Chico Creek project, contact Jim Bolger at jbolger@u.washington.edu or Marilyn Freeman at 206/553-0038, 1-800-424-4372 x0038 or freeman.marilyn@epa.gov.

ECOSYSTEM

You may remember this article from its publication two years ago in WaterTalk. Due to the urgency of this topic, and people's renewed interest in low water-use landscaping, we offer it to you once again.

Conserve Water With Beneficial Landscaping

Nowadays water conservation is important year round, but especially during our Pacific Northwest summer droughts. The dry season has begun, so it is a good time to focus on steps to conserve water in planning and maintaining our landscapes--be they commercial, public, or private properties.

Planning your landscape for water conservation from the beginning is a great idea. Such a plan

will encompass the steps that follow here. Even if you haven planned, it not too late to apply many of these Awater-wise steps:

Minimize clearing. Prevention is the best medicine! Minimize the clearing of native vegetation when creating your site plan, since native plants are already adapted to the site where they are growing, and require little or no maintenance, while providing aesthetic, economic, and environmental benefits. Salvage the native plants from cleared areas and use them in your landscape plan.

Prepare the soil. Adding organic matter to your soil can help control surface water runoff, improve plant growth, and ultimately protect salmon streams. That same organic matter helps to conserve water by increasing the soils=s capacity to hold water and make it available to plants.

Have sensible lawn areas. If a lawn is needed, plan for only as much as you really need for the activities you plan to carry out in your landscape. Leave the rest to native and/or water-conserving non-native ground covers, shrubs, and trees.

Select appropriate plants. Be sure to seek information from local sources, such as the Cooperative Extension Service, college and university horticulture departments, nurseries, other local experts, and/or library resources. In addition, it is helpful to know some of the features of water conserving plants. Here are a few clues:

Some plants lose less water from their leaves if they are waxy, shiny/reflective, covered with fine hairs, undulated or curled at the edges, succulent, and/or small. Some plants adapt to dry soil conditions by having shallow spreading roots that can pick up light rains or dew; by spreading by underground rhizomes; or by having deep tap roots that search deeply for and store water during dry periods. Other water conserving strategies are to grow over the soil surface to protect sensitive roots from heat, grow only at night, grow only when water is regularly available such as in the spring, and to go dormant during dry weather.

Analyze your site in order to match sun loving, shade tolerant, moisture loving, and drought tolerant plants with the right locations.

Use mulches. Mulches retain water, lower evaporation from the soil, and even help to contain weeds! By composting over time, organic mulches also enrich your soil and attract helpful organisms such as earth worms and other decomposers.

Appropriate maintenance. If you take the above steps, your need for irrigation could be minimal to nil. If you do irrigate, pay attention to the amount applied to prevent overwatering, and the area of application to avoid watering the pavement. Water in the early morning or evening rather than during the middle of the day. Irrigation can be a science in itself, with equipment ranging from drip irrigation systems and soaker hoses to professionally installed, mechanized, and timer operated sprinkler systems. For more advice, consult the Cooperative Extension Service or other local experts.

Conserving water brings us closer to our Aroots. However you approach it, enjoy the challenge! For more information, contact Elaine Somers, EPA Region 10 Beneficial Landscaping Program, at 206/553-2966, 1-800-424-4EPA x2966 or somers. elaine @epamail.epa.gov.

Adapted from information provided by the Water Conservation Coalition of Puget Sound.

CALENDAR

August

16-17: Power and Water, Seattle, Washington. Law Seminars International, 206/621-1938 or 1-800-854-8009.

September

- **1-Oct 14**: Washington WaterWeeks, 360/943-3642, www.waterweeks.org
- **9-11**: Biosolids: The Next Generation, Chelan, Washington. National Biosolids Management Association, 1-800-942-4978 or 509/335-3530.
- **17-18**: Northwest On-Site Wastewater Treatment Short Course & Equipment Exhibition, Seattle, Washington. 1-866-791-1275, ww-epp@engr.washington.edu
- **6-8**: Oregon Sustainability Forum, Portland, Oregon. Kerry Rae Connolly, 503/221-6911, kerryrae@sustainablenorthwest.org.

October

- **15-16**: Drinking Water Communications Workshop, Treasure Valley, Idaho, Jeff Long, Idaho Rural Water, 208-343-7001 or 1-800-962-3257.
- **17**: Deadline for November WaterTalk. Andrea Lindsay, Editor, 206/553-1896 or 1-800-424-4EPA x1896, lindsay.andrea@epa.gov.
- **18-19**: Drinking Water Communications Workshop, Shelton, Washington, Scott Hemingway, Evergreen Rural Water, 509/962-6326.
- **22-23**: Drinking Water Communications Workshop, Tillamook, Oregon, Cheris Lane, Oregon Assoc. of Water Utilities, 503/873-8353.

November

6: Vomocil Water Quality Conference, Corvallis, Oregon. Oregon State University Extension, 541/737-2041.